

	A	B	C	D	E	F	G	H
1	ATTACHMENT 1					EPA Fish Consumption Rates		
2								
3						Potentially Exposed Populations		
4					Recreational Fisher	Recreational Fisher	Non-Tribal High Fish Consumer	Tribal Consumer
5	Exposure Parameter	Units			Average Consumption	High End Consumption	High End Consumption	
6	Exposure point concentration	mg/kg			see discussion on next page	see discussion on next page	see discussion on next page	see discussion on next page
7	Fish ingestion rates	grams/day	Final Adult (from study)		17.5 (1/4 lb/week or 1/2 meal/week) ¹	73 (1.1 lb/week or 2 meals/week)	142.4 (2.2 lb/week or 4 meals /week)	175 (2.7 lb/week or 5.4 meals/week)
8			Children (from CRITFC study)					73
9			Ratio of child/adult ingestion rates					0.42
10			Final Children (using ratio)		7	31	60	73
11	Crayfish ingestion rates	grams/day	Adults (from study)		3.3 (0.05 lb/week)	18 (<1/3 lb/week)	18 (<1/3 lb/week)	18 (<1/3 lb/week)
12	Exposure frequency	days/year			365	365	365	365
13	Exposure duration	years	Adults		30/70	30/70	30/70	70
14			Children<6		6	6	6	6
15	Body weight	kg	Adults		70	70	70	70
16			Children<6		15	15	15	15
17	Averaging time²		Adults	cancer	25,550	25,550	25,550	25,550
18				non-cancer	10,950/25,550	10,950/ 25,550	10,950/25,550	10,950/25,550
19			Children<6	non-cancer	2,190	2,190	2,190	2,190

FOOTNOTES

17.5 g/day - 90th percentile US per capita consumption rate of uncooked freshwater and estuarine fish (17.37 g/day)(Section 5.1.1.1, Table 4, USEPA, Estimated Per Capita Fish Consumption in the US, 2000); default for average of recreational fishers in EPA WQC Methodology.

73 g/day- upper 95th Confidence Interval of consumption rate for 75% of total weight of fish consumed (73.4 g/day), Columbia Slough data (Adolphsen, 1996).

142.4 g/day- 99th percentile US per capita consumption rate of uncooked freshwater and estuarine fish (143.35 g/day)(Section 5.1.1.1., Table 4, USEPA, Estimated Per Capita Fish Consumption in the US, 2000):default for subsistence fisherpersons in EPA WQC Methodology

175 g/day - 95th percentile consumption rate for all fish species for adults, consumers only (CRITFC)

73 g/day - 95th percentile consumption rate for all fish species for children, consumers only (CRITFC and Spokane River Report)

0.42 - ratio of 95th percentile consumption rates of children to adults in CRITFC

3.3 g/day - mean US per capita consumption rate (3.27 g/day) of uncooked freshwater/estuarine shellfish for US population, ages 18 and older. (Section 5.1.3, Table 2, USEPA, Estimated Per Capita Fish Consumption in the US, 2000))

18 g/day - 95th percentile US per capita consumption rate (17.93 g/day) of uncooked freshwater/estuarine shellfish for US population, ages 18 and older. (Section 5.1.3, Table 2, USEPA, Estimated Per Capita Fish Consumption in the US, 2000))

1 - a meal is assumed to be 8 ounces of uncooked fish for an adult

2 - For adults, for cancer risk assessment, averaging time is the lifetime of an adult (70 years or 25,550 days); for non-cancer hazard assessment, averaging time is the exposure period. Thus for 30 years of exposure, the averaging time is 10,950 for adults and for 70 years of exposure it is 25,550 days for adults. For children, only non-cancer hazards are calculated; thus averaging time is exposure duration of 6 years or 2,190 days.